

U. S. DEPARTMENT OF ENERGY
ROCKY PLATS PLANT
ENVIRONMENTAL RESTORATION PROGRAM WEEKLY REPORT
WEEK ENDING OCTOBER 23, 1992

Section I - Interagency Agreement

OU 1 - RFI Hillside

Phase III RFI/RI Field Activities -- The OU 1 Draft Phase III RFI/RI Report will be delivered to EPA and CDH on the scheduled IAG milestone date of October 28, 1992.

IRA Operations -- Results of analytical laboratory work have been delayed, and this has delayed the discharge of treated water from Effluent Tank 207. During the original laboratory analysis, abnormally high nitrate/nitrite concentrations were encountered. EG&G believes the result is erroneous. However, the subcontractor is certain no error was made in the analysis. A second sample was taken and was sent to another laboratory to verify the results. Tank 207 will be discharged to the South Interceptor Ditch (SID) once all laboratory results verify that there are no contaminants above threshold levels.

When the french drain was built on the 881 hillside, much of the vegetation was destroyed. At the request of EPA, a revegetation project was implemented and the initial phase of seeding was very successful. During the week of November 6, 1992, the final phase of revegetation will be completed when a native seed mix will be spread and approximately 100 trees (2'-4') will be planted on the hillside.

Repair and retest of the french drain influent piping for leaks continued. The subcontractor is continuing to isolate and pressure test sections of the line, and the subcontractor believes they have located the leak. The influent pipe that connects the french drain with the treatment plant is 2,000 ft. long.

A fully automated instrumentation panel was recently installed in the 891 treatment building. A panel check was completed on October 23, 1992.

Treatability Study/Feasibility Study (TS/FS)

Analyses of core samples from OU 1 for the Treatability/Feasibility Study have been completed. Analytical results for all the samples show that volatile organic compounds (VOCs) contamination in the core samples is not sufficient to perform treatability tests for soil flushing technology. Several options exist at the present time in order to obtain additional data in support of the Feasibility Study at OU 1. A meeting is being scheduled between RFO and EG&G to discuss this issue. The results of this meeting will be reported when available.

OU 2 - 903 Pad, Mound, East Trenches Area

Phase II RFI/RI Bedrock Work Plan -- RFO is identifying tasks to be included in a revised Bedrock Work Plan. A meeting was held on October 22, 1992, with EG&G and the subcontractor to present alluvial field work findings and continue to define the revised bedrock scope of work. Scheduling will be finalized before November 6, 1992. A final approach will then be discussed with the regulatory agencies. A meeting is tentatively planned for November/December to discuss the revised approach.

Subsurface Interim Measure/Interim Remedial Action (IM/IRA) -- EG&G comments have been incorporated into the draft copy of the Pilot Test Plan, In Situ Volatilization Technology, Subsurface IM/IRA. A draft copy was received by RFO for review and comment on October 22, 1992. Submittal of the Draft Pilot Test Plan to the regulatory agencies will be October 29,

1992, the IAG milestone date.

OU 3 - Offsite Releases -- Soil trench sampling began October 19, 1992, and is scheduled for completion by October 29, 1992, weather permitting. Approximately 40 surface soil sampling locations remain to be sampled along with the air sampling to complete OU 3 field work. On a per sample basis, approximately 66% of the field work is completed.

A meeting was held on October 16, 1992, with EG&G to discuss future land use of the Great Western Reservoir under the Option B Program. A risk scenario will be included in the OU 3 Remediation Investigation (RI) Report evaluating the risk decision to drain the reservoir and have no long-term water storage. This decision adds scope to the original Work Plan. The effect this decision will have on the OU 3 project is currently being evaluated.

OU 4 - Solar Evaporation Ponds -- The Final Implementation Plan was provided to EG&G on October 20, 1992. The implementation plan outlines the steps needed to be taken to implement the OU 4 Phase I RFI/RI Work Plan. The Phase I RFI/RI schedule has been revised to initiate the field work in Pond 207 A in late December 1992. The initial field work will consist of radiation surveys and ground penetrating radar (GPR). Pond 207A is now dry, and measures are being developed to keep it dry.

The Health and Safety Plan (HSP) for OU 4 is expected to be approved during the week of October 26, 1992.

RFO received the Technical Memorandum (TM) for Vadose Zone Characterization on October 19, 1992, for review and comment. After comments are resolved, the field sampling plan will commence and the TM will be implemented in January 1993.

OU 5 - Woman Creek -- The approved Final TM # 1, Revised Network Design -- Field Sampling Plan, the approved Final TM # 2, Surface Geophysical Surveys, and the Draft TM # 3, Surface Soil Sampling at IHSS 155 were delivered to the regulatory agencies on October 16, 1992. The TMs are considered final although the regulatory agencies may still have minor comments.

The High Purity Germanium (HPGe) Survey dealing with the wide spaced grid (150 ft. centers) is complete on collection of data. The field work over the closed spaced grid (25 ft. centers) will begin the week ending October 30, 1992.

All comments have been received from EG&G and incorporated into the HSP for the Environmental Evaluation (EE). The HSP was approved on October 21, 1992. Field activities will now commence.

OU 6 - Walnut Creek -- Sediment sampling is 30% complete in the ponds (IHSS 142). The soil gas survey of the Triangle Area (IHSS 165) is 90% complete. The electromagnetic survey over the Trenches Area (IHSS 166) is complete. Surface soil sampling is in progress on the North Area Spray Field (IHSS 167.1), and Surface Soil Sampling is completed on the South Area Spray Field (IHSS 167.3). Surface soil sampling has started on the Soil Drum Area (IHSS 156.2). The Electromagnetic survey of the Trenches (IHSS 166) is complete.

The HSP and EE has been reviewed and approved. EE field operations consisting of testing small mammals for levels of metals and PCB started October 21, 1992.

TM#1, Addendum to Final Phase I RFI/RI Work Plan, recommends and proposes changes to the bedrock and alluvial well drilling program, ambient air

monitoring, radiation survey at IHSS 165, and surface water sampling. RFO and EG&G believe that enacting the proposed changes described in TM#1 will scientifically improve the OU 6 Work Plan while significantly reducing the cost to implement the actual work. The overall scope and objectives set forth in the IAG and in the Final Work Plan remain unchanged. Comments on TM#1 have been received by DOE HQ. Discussions with the regulatory agencies regarding TM #1 continue during the week of October 23, 1992. RFO is arranging a meeting with the regulatory agencies and EG&G to address concerns and comments.

OU 7 - Present Landfill --Final comments on the revised HSP were addressed during the week of October 23, 1992. Approval of the document is anticipated.

Two changes to the approved OU 7 Phase I RFI/RI Work Plan were proposed to CDH. 1) Raise the field detection limits for the soil gas survey from 1 part per billion (ppb) to 1 part per million (ppm) as this is only a survey technique, and attaining 1 ppb would require substantial equipment upgrades. CDH concurred on this change since the data is intended for EPA quality Level 1 or 2 decision making with respect to the design of a surficial soil sampling grid. 2) Regarding open hole packer testing, substitute slug tests in completed monitor wells since this would essentially obtain the same point estimate of hydraulic conductivity and reduce costs. CDH indicated this would be acceptable, but later decided to research this issue further. If approved, both changes would be officially submitted via a TM.

OU 8 - 700 Area -- Meeting minutes from comment review meetings held on September 24, 1992, with DOE, the regulatory agencies, and EG&G will be reviewed by RFO during the week ending October 23, 1992. The Draft Final Phase I RFI/RI Work Plan is scheduled for receipt by RFO by November 13, 1992. RFO will review the Work Plan prior to final delivery to the regulatory agencies on December 1, 1992.

OU 9 - Original Process Waste Lines --Due to funding limitations, only a minimal level of effort for project management tasks will be performed on OU 9 during FY93. These tasks include ADS reporting, routine monthly reporting, updating the Administrative Record, Work Package briefings, highlights, and cost account reporting.

OU 10 - Other Outside Closures -- The Statement of Work (SOW) to implement the OU 10 Final Phase I RFI/RI Work Plan is being prepared. Responses to Work Plan comments from the regulatory agencies were prepared and RFO received them on October 1, 1992. All previously scheduled activities for FY93 will be deferred due to budget limitations.

OU 11 - West Spray Field --A proposal was made to streamline the field sampling in OU 11. CDH commented on this proposal by stating that the minimum data necessary to support a No Further Action Justification (NFAJ) would be at the same level required to support a risk assessment. CDH agreed that limiting field operations to a single phase would be mutually beneficial, and agreed to attend a scoping meeting with RFO and EG&G in early December to assist in developing an acceptable field sampling scope.

OU 12 - 400/800 Areas -- The OU 12 Final Phase I RFI/RI Work Plan was delivered to the regulatory agencies on the scheduled IAG milestone date of October 5, 1992. All previously scheduled activities for FY93 will be deferred due to budget limitations.

4/1/92

OU 13 - 100 Area -- The OU 13 Final Phase I RFI/RI Work Plan was submitted to the regulatory agencies on October 9, 1992, meeting the IAG milestone date. The Work Plan was revised to reflect comments received from the regulatory agencies and is scheduled to be approved in November 1992. Work on the SOW has been initiated, but field activities will not begin. All previously scheduled activities for FY93 will be deferred due to budget limitations.

OU 14 - Radioactive Sites -- The OU Final Phase I RFI/RI Work Plan comments from the regulatory agencies were incorporated into the Work Plan. The Work Plan is scheduled for receipt by RFO on October 15, 1992, and submitted to the regulatory agencies on October 19, 1992, the IAG milestone.

OU 15 -- Inside Building Closures -- All regulatory agency comments have been resolved on the OU 15 Draft Phase I RFI/RI Work Plan. The draft Final Work Plan will be delivered to the regulatory agencies on October 26, 1992, the IAG milestone date.

OU 16 - Low-Priority Sites -- The revised NFAJ document was revised to incorporate comments from the regulatory agencies. The revised document was delivered to the regulatory agencies on October 16, 1992.

Sitewide Treatability Studies

Soil Washing Demonstration (NPT)

Sampling for this project is now tentatively scheduled for October 29, 1992. Concerns with the HSP have been addressed and the subcontractor is ready to start sampling. Test work will begin within three weeks after they receive the soil sample.

Status of Building 881

There have been additional delays in modifying the process drain system in Building 881. These delays may eventually impact some of the treatability testing which is scheduled for 881. As a contingency, a SOW is being prepared for submission to Procurement to obtain an outside laboratory to conduct the Oxidation/Reduction treatability study.

Sitewide Treatability Studies on Ion Exchange and Adsorption

Work continues on the Work Plan for the Sitewide Treatability Study on Ion Exchange and Adsorption. The draft Work Plan is being reviewed and comments are being discussed by EG&G and the subcontractor. Due to funding decisions, only the adsorption treatability study will actually be initiated in FY93. The ion exchange treatability study will have to be performed sometime after FY93.

Other Activities

PA Decontamination Facility -- Work continues on construction of the decontamination facility used to decontaminate drill rigs and drilling equipment from ER activities inside the Protected Area (PA). Completion of the decontamination facility is expected by October 30, 1992.

Landfill Decontamination Facility -- Title II design will begin shortly on the Landfill Area Decontamination facility. Construction is expected to begin in the Landfill area in February 1993, and work will be completed by April, 1993.

ER Baseline -- Subproject (ADS) technical baselines for all the ER Program subprojects were prepared and will be reviewed by RFO after receipt on October 28, 1992.

Public Meeting Plan -- A meeting is scheduled for October 29, 1992, with the Technical Review Group, at 8:30 p.m. - 12:00 noon, Westminster City Hall, 4800 W. 92nd Ave., Westminster.

Section II - Pondcrete Activities

EG&G has nearly completed the increased staffing of the Solar Ponds Program Office. To date, 24 positions have been filled. Also, a subcontract was awarded to ICF/Kaiser to independently review technical and cost aspects of the HNUS sludge solidification process. This subcontract is a supplemental contract for near-term evaluations to support DOE's decisions on the programs future.

Solar Pond water management activities continue. The transfer of A Pond to B Pond was completed October 23, 1992, three days ahead of schedule. A detailed, integrated schedule was developed for all water management activities. The schedule includes completing the installation of the evaporators and modular tanks as well as the tests and reviews prior to startup.

Options are being developed for processing the sludge in the ponds. Options were brainstormed with RFO and EG&G last week and a schedule was established for presenting the results to HQ. The HQ pre-briefing is scheduled for November 9, 1992, and the actual briefing is scheduled for November 12, 1992. These options will also be discussed with the regulatory agencies the week ending October 30, 1992. RFO suggested several options including one scenario where Halliburton-NUS takes over the entire solidification program including program management. EG&G could not directly support the development of this option. RFO would have to develop the details and analysis of this option with data provided by EG&G.

Section III - Surface Water Management

IAG Work Plan Submitted

In order to obtain final approval, RFP personnel have submitted the revised Section 3 and the Table of Contents for the Work Plan for the Control of Radionuclide Levels in Water Discharged from the RFP, as well as a revised Page 27 to the Document Review and Comment Record for the Work Plan to RFO for their submittal to the regulatory agencies. This Work Plan was prepared in response to Section XII of the SOW to the IAG and addresses the control of radionuclides in water discharges from RF holding/detention ponds. The Work Plan describes sampling methods, analytical protocol, methods and limitations for determining radionuclide levels, summarizes statistical assessments of accumulated analytical results, and presents recommendations for additional radionuclide studies to better characterize the water quality of RFP. The Work Plan was granted conditional approval on March 2, 1992. The remaining two conditions were resolved by a change in document wording that met the approval of RFO and the regulatory agencies.

Particle Analysis System on OU 2

The Particle Analysis System (PAS) has been used successfully over the past week to collect data on-line at OU 2. The PAS is connected on-line to the Memtek® membrane filtration effluent to monitor the water quality in particle counts and distributions. The PAS will be used to assist the chemical dosage testing that began this week.

OU 6 Detention Pond Bottom Sediment Sampling

RFP detention pond bottom sediment sampling in OU 6 began on October 14, 1992. As of October 20, 1992, the subcontractor had completed sample collection in Pond A-4 and Pond B-5. Sampling on Pond A-3 started on October 21, 1992.

Section IV - Transition/Decontamination and Decommissioning

Section V - Meetings

OU 1 -- A meeting was held October 23, 1992, with RFO to decide on whether to proceed with the treatability study tests scheduled for October. It was decided not to proceed with the scheduled October treatability study tests until the sample result problem with insufficient VOCs is resolved.

OU 2 -- A meeting was held October 22, 1992, with RFO, EG&G, and the subcontractor to present alluvial field work findings and continue to define the revised Bedrock scope of work. Final scheduling will be worked out with RFO before November 6, 1992. A final approach will then be discussed with the regulatory agencies by December 1992.

OU 3 -- A meeting was held on October 16, 1992, with EG&G to discuss future land use of the Great Western Reservoir under the Option B Program.

Section VI - Future

Year-End Review

The DOE/HQ year-end review of the RFP ER Program will be held in Germantown, MD, on October 27-28, 1992.

RFP ER Baseline

RFO will deliver the revised RFP ER Program Revised Scope, Schedule and Cost Baseline to HQ on October 28, 1992.

October 1992 IAG Milestones Scheduled for Delivery from RFO to EPA/CDH:

| <u>OU</u> | <u>Milestones</u> | <u>Date</u> |
|-----------------------|---|---------------|
| <u>Due to EPA/CDH</u> | | |
| 12 | Submit Final Phase I RFI/RI Work Plan | Oct. 5, 1992 |
| 13 | Submit Final Phase I RFI/RI Work Plan | Oct. 12, 1992 |
| 14 | Submit Final Phase I RFI/RI Work Plan | Oct. 19, 1992 |
| 15 | Submit Final Phase I RFI/RI Work Plan | Oct. 26, 1992 |
| | Submit Final Phase I RFI/RI Work Plan | Oct. 28, 1992 |
| 02 | Submit Draft Subsurface IM/IRA/ER Test Plan | Oct. 29, 1992 |

*extended from original IAG date of July 30, 1992, with approval from EPA/CDH.